AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-4. (Cancelled)

5. (Currently Amended) ~~An image-processing device according to claim 1,~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of pixels arranged in a matrix, each pixel of the plurality of pixels including a photo diode and a transistor that detects a light signal; and

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal;

the solid-state image-pickup device having an output circuit that outputs a valid signal to the signal-processing unit, the valid signal indicating whether the output signal from the solid-state image-pickup device is valid or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal makes the valid signal deactivated at a time when at least one of an idle frame, an accumulation frame, an interlacing frame and an H blanking period is activated.

6. (Currently Amended) An image-processing device according to claim 5, wherein the H blanking period makes the H blanking operation deactivated during the H blanking period in the accumulation state, if the accumulation state where electric charges are stored in the ~~solid-state image-processing~~solid-state image-pickup device continues for more than one frame.

7. (Currently Amended) ~~An image-processing device according to claim 1,~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of pixels arranged in a matrix, each pixel of the plurality of pixels including a photo diode and a transistor that detects a light signal; and

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal;

the solid-state image-pickup device having an output circuit that outputs a valid signal to the signal-processing unit, the valid signal indicating whether the output signal from the solid-state image-pickup device is valid or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal makes the valid signal deactivated at a time when at least one of an idle frame, an accumulation frame, an interlacing frame, an H blanking period and a period for indicating a final line counted value is activated.

8. (Currently Amended) An image-processing device according to claim 7, wherein the H blanking period makes the H blanking operation deactivated during the H blanking period in the accumulation state, if the accumulation state where electric charges are stored in the ~~solid-state image-processing~~solid-state image-pickup device continues for more than one frame.

9. (Currently Amended) ~~An image-processing device according to claim 1,~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of pixels arranged in a matrix, each pixel of the plurality of pixels including a photo diode and a transistor that detects a light signal; and

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal;

the solid-state image-pickup device having an output circuit that outputs a valid signal to the signal-processing unit, the valid signal indicating whether the output signal from the solid-state image-pickup device is valid or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal makes the valid signal activated ~~at s time~~at a time when all of an idle frame, an accumulation frame, an interlacing frame, an H blanking period and a period for indicating a final line counted value are deactivated and a period for reading out an image signal from a line memory is activated.

10. (Currently Amended) An image-processing device according to claim 9, wherein the H blanking period makes the H blanking operation deactivated during the H blanking period in the accumulation state, if the accumulation state where electric charges are stored in the ~~solid-state image-processing~~solid-state image-pickup device continues for more than one frame.

11-12. (Cancelled)

13. (Currently Amended) ~~An image-processing device according to claim 1,~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of pixels arranged in a matrix, each pixel of the plurality of pixels including a photo diode and a transistor that detects a light signal; and

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal;

the solid-state image-pickup device having an output circuit that outputs a valid signal to the signal-processing unit, the valid signal indicating whether the output signal from the solid-state image-pickup device is valid or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal increases a deactivated rate of the valid signal intermittently as a frame unit in response to a decreasing frame rate when the ~~solid-state image-processing~~solid-state image-pickup device is operated with a low frame rate.

14-15. (Cancelled)

16. (Currently Amended) ~~An image-processing device according to claim 3,~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of unit pixels arranged in a matrix, each unit pixel including a photo diode and a transistor for detecting a light signal;

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal; and

an output circuit, arranged in the solid-state image-pickup device, that outputs a valid signal to the signal-processing unit, the valid signal controlling whether the signal-processing unit performs the signal processing operation or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal makes the valid signal deactivated at a time when at least one of an idle frame, an accumulation frame, an interlacing frame and an H blanking period is activated.

17. (Currently Amended) An image-processing device according to claim 16, wherein the H blanking period makes the H blanking operation deactivated during the H blanking period in the accumulation state, if the accumulation state where electric charges are stored in the ~~solid-state image-processing~~solid-state image-pickup device continues for more than one frame.

18. (Currently Amended) ~~An image-processing device according to claim 3,~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of unit pixels arranged in a matrix, each unit pixel including a photo diode and a transistor for detecting a light signal;

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal; and

an output circuit, arranged in the solid-state image-pickup device, that outputs a valid signal to the signal-processing unit, the valid signal controlling whether the signal-processing unit performs the signal processing operation or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal makes the valid signal deactivated at a time when at least one of an idle frame, an accumulation frame, an interlacing frame, an H blanking period and a period for indicating a final line counted value is activated.

19. (Currently Amended) An image-processing device according to claim 18, wherein the H blanking period makes the H blanking operation deactivated during the H blanking period in the accumulation state, if the accumulation state where electric charges are stored in the ~~solid-state image-processing~~solid-state image-pickup device continues for more than one frame.

20. (Currently Amended) ~~An image-processing device according to claim 3~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of unit pixels arranged in a matrix, each unit pixel including a photo diode and a transistor for detecting a light signal;

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal; and

an output circuit, arranged in the solid-state image-pickup device, that outputs a valid signal to the signal-processing unit, the valid signal controlling whether the signal-processing unit performs the signal processing operation or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal makes the valid signal activated ~~at s time~~at a time when all of an idle frame, an accumulation frame, an interlacing frame, an H blanking period and a period for indicating a final line counted value are deactivated and a period for reading out an image signal from a line memory is activated.

21. (Currently Amended) An image-processing device according to claim 20, wherein the H blanking period makes the H blanking operation deactivated during the H blanking period in the accumulation state, if the accumulation state where electric charges are stored in the ~~solid-state image-processing~~solid-state image-pickup device continues for more than one frame.

22-23. (Cancelled)

24. (Currently Amended) ~~An image-processing device according to claim 3~~ An image-processing device, comprising:

a solid-state image-pickup device provided with a plurality of unit pixels arranged in a matrix, each unit pixel including a photo diode and a transistor for detecting a light signal;

a signal-processing unit that processes an output signal from the solid-state image-pickup device and outputs the processed signal as an image signal; and

an output circuit, arranged in the solid-state image-pickup device, that outputs a valid signal to the signal-processing unit, the valid signal controlling whether the signal-processing unit performs the signal processing operation or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal increases a deactivated rate of the valid signal intermittently as a frame unit in response to a decreasing frame rate when the ~~solid-state image-processing~~solid-state image-pickup device is operated with a low frame rate.

25. (New) A solid-state image-pickup device, comprising:

a plurality of pixels arranged in a matrix, each pixel of the plurality of pixels including a photo diode and a transistor that detects a light signal; and

an output circuit that outputs a valid signal to a signal-processing unit, the valid signal indicating whether an output of a signal-processing unit is valid or not in response to an operation of the solid-state image-pickup device,

wherein the output circuit outputting the valid signal increases a deactivated rate of the valid signal intermittently as a frame unit in response to a decreasing frame rate when the solid-state image-pickup device is operated with a low frame rate.